

REMARKS

This is a full and timely response to the decision on Appeal dated October 27, 2010, which affirms the rejections presented in the Final Office Action of August 22, 2008 (the “Office Action” or “Action”). Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested.

Claim Status

By the preceding amendment, claims 1, 12, 18, 30, 33, and 34 have been amended. No claims have been cancelled or withdrawn from consideration. Thus, claims 1-39 are currently pending for further action.

Request for Continued Examination:

Applicant hereby requests Continued Examination for this application and entry and consideration of this amendment consequent thereto.

Examiner Interview

On December 16, 2010, an Applicant-initiated Examiner interview was conducted by telephone. In the interview, Examiner Gillis and Applicant’s representative briefly discussed the outstanding rejections against the pending claims of this application. Applicant’s representative and the Examiner did not reach an agreement regarding the patentability of the subject matter of the claims.

Prior Art

1. Claims 1-6, 8-16, 18, 19, and 21-37 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious over U.S. Patent No. 5,819,028 to Manghirmalani et al. (“Manghirmalani”) in view of U.S. Patent Application Publication No. 2004/0078683 by Buia et al. (“Buia”) and U.S. Patent No. 7,080,141 to Backelmans et al. (“Backelmans”). For at least the following reasons, this rejection is respectfully traversed and should be reconsidered and withdrawn.

Claim 1

Claim 1 now recites:

A network management station, comprising:
a processor;
a memory coupled to the processor; and
program instructions provided to the memory and executable by the processor
to:
transmit a network management message to a device connected to the
network management station over a network;
collect response information from the device based on the network
management message;
receive unsolicited information from the device;
analyze the response information and the unsolicited according to a set
of heuristics ***to determine that the device is overburdened; and***
reroute data traffic directed to the overburdened device to an alternate,
underutilized network device.

(Emphasis added).

Support for the amendment to claim 1 can be found in Applicant’s originally filed specification at, for example, page 9, lines 24-33.

A *prima facie* case of obviousness made under 35 U.S.C. § 103(a) requires a showing that all of the subject matter in the claim at issue would be obvious to one having ordinary skill in the art based on the teachings of the cited prior art at the time of invention. See M.P.E.P. § 2143. In light of the amendments made to claim 1, no *prima facie* case of

obviousness has been established against claim 1 because the cited prior art does not teach or suggest all of the subject matter of claim 1.

Manghirmalani is directed to “an apparatus and method for using generic network management objects for providing information on a computer network.” (Manghirmalani, col. 4 lines 31-33). In the Manghirmalani system, a network management system “collect[s], monitor[s], control[s], and display[s] various aspects associated with the computer network . . . by gathering data close to the source; reducing the data to meaningful information; and presenting the resulting data to one or more central management stations which then displays the data to an operator.” (Manghirmalani, col. 5 lines 27-3). Manghirmalani further teaches computing a network health score, which is “an overall numerical representation of how well the network is functioning.” (*Id.*, col. 6 lines 18-19).

However, Manghirmalani fails to teach or suggest “rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device.” (Claim 1). While Manghirmalani does discuss determining the loads on network devices, Manghirmalani makes no teaching or suggestion of remedial action to be taken in response to determining that a device is overburdened.

Buia fails to remedy the deficiencies of Manghirmalani in rendering the subject matter of claim 1 obvious. Buia is directed to fault diagnosis in computer systems including “a fault detector constructed and arranged to detect a fault in a monitored entity;” “a fault repository constructed and arranged to store and access the fault object;” and “a fault handler constructed and arranged to be triggered by the fault diagnosis engine to analyze the fault object.” (Buia, para. 0034). While Buia teaches methods for diagnosing the root cause of a fault, Buia makes no teaching or suggestion of “rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device” after determining that the

device is overburdened using solicited and unsolicited information from the network device. (Claim 1).

Baekelmans fails to remedy the deficiencies of Manghirmalani and Buia in rendering the subject matter of claim 1 obvious. Baekelmans is directed to “a network based management system [which] enables network devices installed at a customer’s premises to be automatically monitored and managed for automated support services, based on coordinated information transfer between monitoring agents and troubleshooting resources at the customer premises, and centralized troubleshooting systems and databases in the device manufacturer’s network infrastructure.” (Baekelmans, col. 2 lines 45-53). Baekelmans teaches the use of proactive notifications and managed troubleshooting support for network devices. Nevertheless, Baekelmans also fails to teach or suggest “rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device” after determining that the device is overburdened using solicited and unsolicited information from the network device. (Claim 1).

According to the Supreme Court, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966), “continue to define the inquiry that controls” obviousness rejections under 35 U.S.C. § 103. *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, 407 (2007). Under the analysis required by *Graham* to support a rejection under 35 U.S.C. § 103,

the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

Graham, 383 U.S. at 17-18.

While these inquiries are factual, the ultimate determination of obviousness is a conclusion of law made in view of the totality of the resolved *Graham* factors. *KSR*, 550 U.S. at 427; *Graham*, 383 U.S. at 17.

Applying the *Graham* analysis to the present rejection of claim 1, the scope and content of the prior art, as evidenced by Manghirmalani, Buia, and Baekelmans, does not include all of the claimed subject matter, particularly at least “rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device” after determining that the device is overburdened using solicited and unsolicited information from the network device. (Claim 1).

The differences between the cited prior art and claim 1 are significant because the claimed subject matter provides features and advantages not known or available in the cited prior art. Therefore, no combination of the cited prior art references would feasibly produce the subject matter recited in claim 1. This fact is significant because under the rationale chosen by the Examiner to reject claim 1, a *prima facie* case of obviousness requires a factual demonstration that “the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.” M.P.E.P. § 2143(A).

Consequently, the cited prior art will not support a rejection of claim 1 under 35 U.S.C. § 103 and *Graham*, and the Office has not met its requisite burden to establish the *prima facie* obviousness of claim 1. For at least these reasons, the rejection of claim 1 and its dependent claims should be reconsidered and withdrawn.

Claim 12

Claim 12 now recites:

A network management station, comprising:
a processor;
a memory coupled to the processor; and

program instructions provided to the memory and executable by the processor to:

poll a device, connected to the network management station over a network, with network management messages;

receive memory utilization, buffer utilization, local area network (LAN) utilization, and cyclical redundancy checking (CRC) information in response to the polling and as unsolicited information initiated by and transmitted from the device;

apply heuristics to the received memory utilization, buffer utilization, LAN utilization, and CRC information from the polling and unsolicited transmissions collectively to ***determine that the device is overburdened; and reroute data traffic directed to the overburdened device to an alternate, underutilized network device.***

(Emphasis added).

Support for the amendment to claim 12 can be found in Applicant's originally filed specification at, for example, page 9, lines 24-33.

The cited prior art also fails to render obvious the subject matter of claim 12, because it does not teach or suggest all of the subject matter recited in claim 12. As demonstrated above with respect to independent claim 1, the combination of Manghirmalani, Buia, and Baekelmans does not teach or suggest "rerout[ing] data traffic directed to the overburdened device to an alternate, underutilized network device" upon determining from solicited and unsolicited information that the device is overburdened. (Claim 12).

Applying the *Graham* analysis to the present rejection of claim 12, the scope and content of the prior art, as evidenced by Manghirmalani, Buia, and Baekelmans, does not include all of the claimed subject matter, particularly at least "rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device" after determining that the device is overburdened using solicited and unsolicited information from the network device. (Claim 12).

The differences between the cited prior art and claim 12 are significant because the claimed subject matter provides features and advantages not known or available in the cited

prior art. Therefore, no combination of the cited prior art references would feasibly produce the subject matter recited in claim 12. This fact is significant because under the rationale chosen by the Examiner to reject claim 12, a *prima facie* case of obviousness requires a factual demonstration that “the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.” M.P.E.P. § 2143(A).

Consequently, the cited prior art will not support a rejection of claim 12 under 35 U.S.C. § 103 and *Graham*, and the Office has not met its requisite burden to establish the *prima facie* obviousness of claim 12. For at least these reasons, the rejection of claim 12 and its dependent claims should be reconsidered and withdrawn.

Claim 18

Claim 18 now recites:

A method for network and network device monitoring, comprising:
transmitting a network management message to a device;
collecting response information from the device based on the network management message;
receiving unsolicited information from the device;
analyzing the response information and the unsolicited information, which include information regarding device memory utilization, buffer utilization, local area network (LAN) utilization, and cyclical redundancy checking (CRC), according to a set of heuristics to ***determine that the device is overburdened; and reroute data traffic directed to the overburdened device to an alternate, underutilized network device.***

(Emphasis added).

Support for the amendment to claim 18 can be found in Applicant’s originally filed specification at, for example, page 9, lines 24-33.

The cited prior art also fails to render obvious the subject matter of claim 18, because it does not teach or suggest all of the subject matter recited in claim 18. As demonstrated above with respect to independent claim 1, the combination of Manghirmalani, Buia, and Baekelmans does not teach or suggest “rerout[ing] data traffic directed to the overburdened device to an alternate, underutilized network device” upon determining from solicited and unsolicited information that the device is overburdened. (Claim 18).

Applying the *Graham* analysis to the present rejection of claim 18, the scope and content of the prior art, as evidenced by Manghirmalani, Buia, and Baekelmans, does not include all of the claimed subject matter, particularly at least “rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device” after determining that the device is overburdened using solicited and unsolicited information from the network device. (Claim 18).

The differences between the cited prior art and claim 18 are significant because the claimed subject matter provides features and advantages not known or available in the cited prior art. Therefore, no combination of the cited prior art references would feasibly produce the subject matter recited in claim 18. This fact is significant because under the rationale chosen by the Examiner to reject claim 18, a *prima facie* case of obviousness requires a factual demonstration that “the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.” M.P.E.P. § 2143(A).

Consequently, the cited prior art will not support a rejection of claim 18 under 35 U.S.C. § 103 and *Graham*, and the Office has not met its requisite burden to establish the

prima facie obviousness of claim 18. For at least these reasons, the rejection of claim 18 and its dependent claims should be reconsidered and withdrawn.

Claim 30

Claim 30 now recites:

A method for network and network device monitoring, comprising:
polling a device with network management messages;
receiving memory utilization, buffer utilization, local area network (LAN) utilization, and cyclical redundancy checking (CRC) information in response to the polling and as unsolicited information initiated by and transmitted from the device;
applying heuristics to the received memory utilization, buffer utilization, LAN utilization, and CRC information from the polling and unsolicited transmissions collectively to determine a health of the network and ***that the device is overburdened; and***
rerouting data traffic directed to the overburdened device to an alternate, underutilized network device.

(Emphasis added).

Support for the amendment to claim 30 can be found in Applicant's originally filed specification at, for example, page 9, lines 24-33.

The cited prior art also fails to render obvious the subject matter of claim 30, because it does not teach or suggest all of the subject matter recited in claim 30. As demonstrated above with respect to independent claim 1, the combination of Manghirmalani, Buia, and Baekelmans does not teach or suggest "rerout[ing] data traffic directed to the overburdened device to an alternate, underutilized network device" upon determining from solicited and unsolicited information that the device is overburdened. (Claim 30).

Applying the *Graham* analysis to the present rejection of claim 30, the scope and content of the prior art, as evidenced by Manghirmalani, Buia, and Baekelmans, does not include all of the claimed subject matter, particularly at least "rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device" after determining

that the device is overburdened using solicited and unsolicited information from the network device. (Claim 30).

The differences between the cited prior art and claim 30 are significant because the claimed subject matter provides features and advantages not known or available in the cited prior art. Therefore, no combination of the cited prior art references would feasibly produce the subject matter recited in claim 30. This fact is significant because under the rationale chosen by the Examiner to reject claim 30, a *prima facie* case of obviousness requires a factual demonstration that “the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.” M.P.E.P. § 2143(A).

Consequently, the cited prior art will not support a rejection of claim 30 under 35 U.S.C. § 103 and *Graham*, and the Office has not met its requisite burden to establish the *prima facie* obviousness of claim 30. For at least these reasons, the rejection of claim 30 and its dependent claims should be reconsidered and withdrawn.

Claim 33

Claim 33 now recites:

A computer readable medium having instructions for causing a device to perform a method, comprising:
transmitting a network management message to a device;
collecting response information from the device based on the network management message;
receiving unsolicited information from the device;
analyzing the response information and the unsolicited information, which include information regarding device memory utilization, buffer utilization, local area network (LAN) utilization, and cyclical redundancy checking (CRC), according to a set of heuristics to ***determine that the device is overburdened; and***

reroute data traffic directed to the overburdened device to an alternate, underutilized network device.
(Emphasis added).

Support for the amendment to claim 33 can be found in Applicant's originally filed specification at, for example, page 9, lines 24-33.

The cited prior art also fails to render obvious the subject matter of claim 33, because it does not teach or suggest all of the subject matter recited in claim 33. As demonstrated above with respect to independent claim 1, the combination of Manghirmalani, Buia, and Baekelmans does not teach or suggest "rerout[ing] data traffic directed to the overburdened device to an alternate, underutilized network device" upon determining from solicited and unsolicited information that the device is overburdened. (Claim 33).

Applying the *Graham* analysis to the present rejection of claim 33, the scope and content of the prior art, as evidenced by Manghirmalani, Buia, and Baekelmans, does not include all of the claimed subject matter, particularly at least "rerout[ing] data traffic directed to [an] overburdened device to an alternate, underutilized network device" after determining that the device is overburdened using solicited and unsolicited information from the network device. (Claim 33).

The differences between the cited prior art and claim 33 are significant because the claimed subject matter provides features and advantages not known or available in the cited prior art. Therefore, no combination of the cited prior art references would feasibly produce the subject matter recited in claim 33. This fact is significant because under the rationale chosen by the Examiner to reject claim 33, a *prima facie* case of obviousness requires a factual demonstration that "the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed

invention and the prior art being the lack of actual combination of the elements in a single prior art reference.” M.P.E.P. § 2143(A).

Consequently, the cited prior art will not support a rejection of claim 33 under 35 U.S.C. § 103 and *Graham*, and the Office has not met its requisite burden to establish the *prima facie* obviousness of claim 33. For at least these reasons, the rejection of claim 33 and its dependent claims should be reconsidered and withdrawn.

Claim 34

Claim 34 now recites:

A network management station, comprising:
a processor;
a memory coupled to the processor;
means for receiving solicited and unsolicited information from a network device, the unsolicited information initiated by and transmitted from the network device, the solicited and unsolicited information including memory utilization, buffer utilization, local area network (LAN) utilization, and cyclical redundancy checking (CRC); and
means for analyzing the received solicited and unsolicited information collectively to ***determine that the network device is overburdened; and***
means for rerouting data traffic directed to the overburdened device to an alternate underutilized network device.
(Emphasis added).

Support for the amendment to claim 33 can be found in Applicant’s originally filed specification at, for example, page 9, lines 24-33.

The cited prior art also fails to render obvious the subject matter of claim 34, because it does not teach or suggest all of the subject matter recited in claim 34. As demonstrated above with respect to independent claim 1, the combination of Manghirmalani, Buia, and Baekelmans does not teach or suggest “rerouting data traffic directed to the overburdened device to an alternate, underutilized network device” upon determining from solicited and unsolicited information that the device is overburdened. (Claim 34).

Applying the *Graham* analysis to the present rejection of claim 34, the scope and content of the prior art, as evidenced by Manghirmalani, Buia, and Baekelmans, does not include all of the claimed subject matter, particularly at least “rerouting data traffic directed to [an] overburdened device to an alternate, underutilized network device” after determining that the device is overburdened using solicited and unsolicited information from the network device. (Claim 34).

The differences between the cited prior art and claim 34 are significant because the claimed subject matter provides features and advantages not known or available in the cited prior art. Therefore, no combination of the cited prior art references would feasibly produce the subject matter recited in claim 34. This fact is significant because under the rationale chosen by the Examiner to reject claim 34, a *prima facie* case of obviousness requires a factual demonstration that “the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference.” M.P.E.P. § 2143(A).

Consequently, the cited prior art will not support a rejection of claim 34 under 35 U.S.C. § 103 and *Graham*, and the Office has not met its requisite burden to establish the *prima facie* obviousness of claim 34. For at least these reasons, the rejection of claim 34 and its dependent claims should be reconsidered and withdrawn.

2. Claims 7, 17, 38, and 39 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious over Manghirmalani in view of Buia, Baekelmans, and U.S. Patent Application Publication No. 2005/0086502 by Rayes et al. (“Rayes”). This rejection is respectfully traversed and should be reconsidered and withdrawn for at least the same reasons given above

in favor of the patentability of independent claims 1, 12, and 34, respectively. *See In re Fine*, 837 F.2d 1071, 1076, 5 USPQ2d 1596 (Fed. Cir. 1988) (if an independent claim is nonobvious, then any claim depending therefrom is nonobvious); M.P.E.P. § 2143.03.

Conclusion

In view of the preceding arguments, all claims are believed to be in condition for allowance over the prior art of record. Therefore, this response is believed to be a complete response to the Office Action. However, Applicant reserves the right to set forth further arguments in future papers supporting the patentability of any of the claims, including the separate patentability of the dependent claims not explicitly addressed herein. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed.

The absence of a reply to a specific rejection, issue or comment in the Office Action does not signify agreement with or concession of that rejection, issue or comment. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment. Further, for any instances in which the Examiner took Official Notice in the Office Action, Applicants expressly do not acquiesce to the taking of Official Notice, and respectfully request that the Examiner provide an affidavit to support the Official Notice taken in the next Office Action, as required by 37 CFR 1.104(d)(2) and MPEP § 2144.03.

If the Examiner has any comments or suggestions which could place this application in better form, the Examiner is requested to telephone the undersigned attorney at the number listed below.

Respectfully submitted,

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